United States Coast Guard
U.S. Department of Homeland Security

U.S. Coast Guard History Program

52-Foot Steel-Hulled Motor Lifeboat

Number:	Completed:	Remarks:
52312	June 1956	*Victory* is stationed at Yaquina Bay, OR
52313	September 1960	*Invincible* was initially stationed at Coast Guard Base Seattle. On 30 November 1960 she transferred to Grays Harbor Lifeboat Station, Westport, WA.
52314	December 1961	*Triumph II* is stationed at Cape Disappointment, WA.
52515	1963	*Intrepid* is stationed at Coos Bay, OR.

Cost: $235,927

Hull
- **Displacement (lbs):** 75,715 (1974)
- **Length:** 52’ oa
- **Beam:** 14’ 7” max
- **Draft:** 6’ 11” normal (1974)

Machinery
- **Main Engines:** 2 General Motors diesels
- **BHP:**
- **Propellers:** twin

Performance
- **Max Sustained:** 11 knots, 495-mile radius (1974)

Logistics
- **Complement:** 5

Electronics
- **Radar:** navigational type

Design
Due to the smaller operations and construction budgets that became the norm in the years following World War II, there was initially not much experimentation with or development of new lifeboats until the 1950s, when a series of four, steel hulled 52’ MLBs were constructed at the Curtis Bay Yard

(***Victory*****,** ***Invincible II*****,** ***Triumph II*****,** and ***Intrepid***) specifically for assignment to Pacific Northwest region stations, where severe surf conditions were commonly encountered. The original wooden 52' MLB versions, although proven highly capable for heavy weather rescue operations, were quickly wearing out and needed replacement. It was determined that their replacements should have hulls of steel rather than wood, aluminum superstructures, twin diesel engines and propellers, and self-righting and self-bailing features.

Similar to the wooden models, the steel versions had full displacement hulls for maximum stability and seaworthiness. Hull strength was reinforced by the use of thicker steel plate on the boat's bottom, and galvanized steel longitudinal frames stiffened by transverse bulkheads and web frames. The superstructure was built of marine grade, high-strength aluminum. For added strength and stability, the design includes a total of seven watertight compartments. A departure from future design practices, the twin propellers were protected by a partial tunnel. The new MLBs were constructed with these characteristics, but due to their relatively (for those days) high cost of $250,000 each, only four could be built from available budget funds. These well-built, rugged, capable craft are still in operation today, and in terms of weather/sea limits, cruising endurance, and towing capacity, are considered the most capable lifeboats in Coast Guard inventory.

With a 14 ½' beam, a 6' draft, and 31.4 ton displacement, the 52' motor lifeboat is powered by twin 150HP GM 6-71 diesels with twin propellers and a single rudder (later replaced with twin rudders). They are capable of 11kts. maximum speed, with an operational range of 495nm. at cruise speed. They have interior and exterior conning stations, a capacity for 5 crew and 35 survivors, and have an installed 250GPM fire/salvage pump (see Appendix X for detailed specifications and drawings).

Following their completion and introduction into service, it was determined that improvements in the steering/rudder system were warranted. In this regard, the originally-installed rudder guard was removed, bilge keels were shortened, twin rudders of a modified size were installed, and a new hydraulic power-assisted steering system was added.

All four of the steel 52' MLBs have served their entire careers at lifeboat stations out on the Pacific Northwest coast where their ruggedness and long endurance are needed for the typically high surf conditions that exist there, along with the operational need to tow disabled fishing craft over longer distances and over inlet bars. These lifeboats have all survived multiple capsizing episodes, as well as pitch-poling incidents. The only criticism that has ever been mentioned of these craft is their relatively slow speed, but in the heavy seas and surf in which they typically operate, this has not been viewed as a significant detriment.

Among other features that increase their range and endurance, the craft is fitted with a complete galley. The boat is equipped with 250-gallon-per-minute pump for dewatering and fire fighting. These are the only Coast Guard vessels under 65-feet in length with names, a tradition started beginning with their 52-foot wooden hulled predecessors. Beyond the search and rescue mission, they are also assigned to maritime law enforcement, marine environmental protection, and recreational boating safety duties.

Images

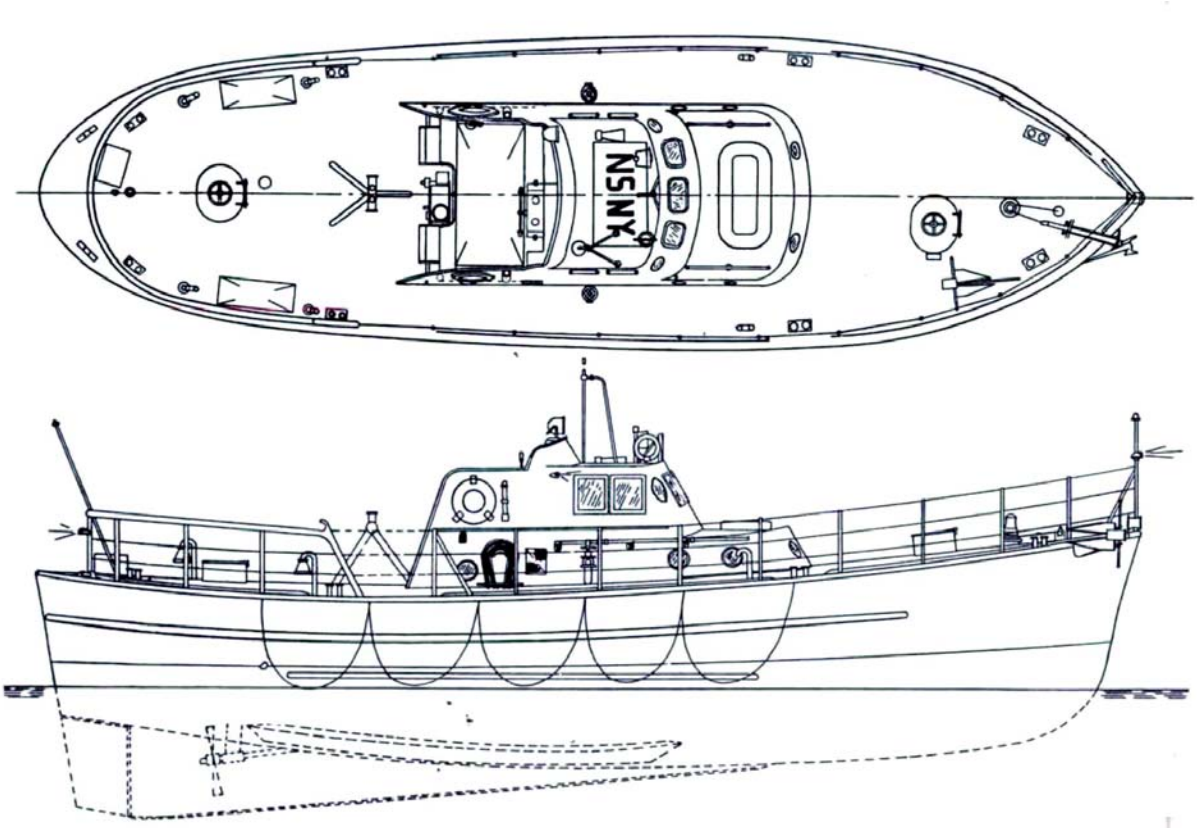
Triumph II underway off Cape Disappointment

Triumph II through the surf.

Invincible underway

All four 52-footers

Unidentified 52-footer underway



Line Drawing of a Steel 52-Foot MLB

Sources

Boat Files, U.S. Coast Guard Historian's Office.

Scheina, Robert L. *U.S. Coast Guard Cutters and Craft, 1946-1990*. Annapolis, MD: Naval Institute Press, 1990.

Wilkinson, William D., and Timothy R. Dring. *American Coastal Rescue Craft: A Design History of Coastal Rescue Craft Used by the United States Life-Saving Service and the United States Coast Guard*. Gainesville: University Press of Florida, 2009.
